

## **REMARKS**

### **General**

The present is in response to the Office Action dated February 25, 2004, where the Examiner has rejected Claims 1-9. Accordingly, Claims 1-9 are pending in the present application. Reconsideration and allowance of pending Claims 1-9 in view of the following remarks are respectfully requested.

### **Status of the Claims**

Claims 1-9 are rejected by the Examiner.

### **Response to Priority and objection to the Specification**

The Examiner has implied that the present application is a "continuation" application versus a "divisional" application. Applicant respectfully submits that the present application is correctly identified as a divisional application under the applicable definition set forth in MPEP section 201.06, which does not require divisional applications to only be filed in response to an Examiner's restriction requirement. Thus, Applicant submits that the specification is in condition for allowance.

### **Response to rejection of Claims 1-9 under 35 U.S.C. §103(a)**

The Examiner has rejected Claims 1-3 and 5-8 under 35 U.S.C. §103(a) as being unpatentable over **Seipp, Jr. et al.** (USPN 5,852,878) (referred to hereinafter as "**R1**") in view of **Ogawa et al.** (USPN 5,930,907) (referred to hereinafter as "**R2**"). For the reasons discussed below, Applicant respectfully submits that the present invention, as defined by independent

Claims 1, 5 and 7 and dependent Claims 2-3, 6 and 8, are patentably distinguishable over **R1** in view of **R2**.

Pending independent Claims 1, 5 and 7 are directed to a method and apparatus for an electrolytic tilt sensor including first and second electrodes, a reference electrode and a housing. The first and second sensing electrodes are formed on a generally planar surface of a dielectric substrate. The reference electrode is also formed on the generally planar surface. The housing is mounted to the dielectric substrate so that the first and second sensing electrodes and the reference electrode are contiguous to a volume defined between the housing and the dielectric substrate. Thus, the electrodes (i.e., first and second sensing electrodes and reference electrode) are substantially electrically isolated from electrical influences outside of the volume defined between the housing and the dielectric substrate. For example, the electrodes are largely unaffected by currents or charges near the exterior surface of the housing.

In stark contrast, **R1** and **R2** do not, singly or in combination teach, disclose, or suggest a process that includes the above-recited limitations specified by Claims 1, 5 and 7. In particular, **R1** discloses an electrolytic toroidal tilt sensing device for electrical coupling to an external measuring circuit. The electrolytic toroidal tilt sensing device includes a housing body for containing electrolytic fluid, which serves as a common electrode. Thus, **R1** teaches a device that is largely affected by currents or charges near the exterior surface of the housing body. **R1** cannot result in the present invention as recited in independent Claims 1, 5 and 7 because **R1** fails to disclose or remotely suggest a method or apparatus that includes electrodes formed on a generally planar surface of a dielectric substrate having a housing mounted to the dielectric substrate so that the electrodes are contiguous to a volume defined between the housing and the dielectric substrate.

**R2** discloses a uniaxial horizontal sensor. **R2** does not disclose or remotely suggest a method or apparatus that includes electrodes formed on a generally planar surface of a dielectric substrate having a housing mounted to the dielectric substrate so that the electrodes are contiguous to a volume defined between the housing and the dielectric substrate.

The Examiner has further rejected Claims 4 and 9 under 35 USC §103(a) as being unpatentable over **R1** and **R2** as applied to Claims 1-3 and 5-8, and in further view of **Takeuchi et al.** (USPN 6,442,855) (referred to hereinafter as “**R3**”). Applicant respectfully submits that the present invention, as defined by independent Claims 1 and 7, from which Claims 4 and 9 respectively depend from, is patentably distinguishable over **R1**, **R2**, **R3** or any combination thereof. As discussed above, independent Claims 1 and 7 are patentably distinguishable over **R1** and **R2** and, as such, Claim 4 depending from independent Claim 1 and Claim 9 depending from independent Claim 7 are, *a fortiori*, also patentably distinguishable over **R1** and **R2**.

**R3** discloses a tilt sensor. **R3** fails to disclose or remotely suggest a method or apparatus that includes electrodes formed on a generally planar surface of a dielectric substrate having a housing mounted to the dielectric substrate so that the electrodes are contiguous to a volume defined between the housing and the dielectric substrate. As such, independent Claims 1 and 7 and dependent Claims 4 and 9 are patentably distinguishable over **R2** and **R2** in combination with **R3**.

The present invention as recited in independent Claims 1, 5 and 7, unlike **R1**, **R2**, **R3** or any combination thereof, is largely unaffected by currents or charges near the exterior surface of the housing. Applicant believes Claims 1, 5 and 7 further particularly point out and distinctly claim these limitations absent from cited references of record. As discussed above, independent Claims 1, 5 and 7 are patentably distinguishable over **R1**, **R2**, **R3** or any combination thereof

and, as such, claims depending from independent Claims 1, 5 and 7 are, *a fortiori*, also patentably distinguishable over **R1, R2, R3** or any combination thereof. Accordingly, Applicant respectfully submits that rejection of Claims 1, 5 and 7 have been traversed, and that independent Claims 1, 5 and 7 and their corresponding dependent Claims 2-4, 6 and 8-9 should now be allowed.

**Rejection of Claims 1-9 under the Judicially Created Doctrine of Obviousness-Type Double Patenting**

The Examiner has rejected Claims 1-9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-9 of USPN 6,625,896 B1. Along with the present response, Applicant has submitted a terminal disclaimer to overcome the Examiner's rejection under the judicially created doctrine of double patenting with respect to Claims 1-9 of USPN 6,625,896 B1. Applicant respectfully submits that the enclosed terminal disclaimer overcomes the Examiner's obviousness-type double patenting rejections.

**Conclusion**

Applicant respectfully requests withdrawal of the rejection of Claims 1-9. Accordingly, Applicant respectfully submits that Claims 1-9 are now in condition for allowance.

An Additional Fee for statutory disclaimer is included with this response.

Navy Case No. 84300

Respectfully submitted,

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By



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